

# **SUMMARY OF THE 2007 ALBUQUERQUE ENERGY CONSERVATION CODE – VOLUMES I AND II**

## **VOLUME I COMMERCIAL AND MULTI-FAMILY RESIDENTIAL BUILDINGS**

- ***Proposed* buildings required to be 30% more energy efficient than a *baseline* building.**
- ***Baseline* building defined as a (hypothetical) building, of the same size and use as the *proposed* building, that meets the minimum energy efficiency requirements of the 1999 edition of ASHRAE Standard 90.1.**
- **Prior to issuing a permit, the building department will require that the increased performance of the *proposed* building be quantified using the *Performance Rating Method* described in Informative Appendix ‘G’ of the 2004 edition of ASHRAE 90.1. This means that the following information will have to be submitted with each permit application for buildings in this category:**
  - 1. Energy calculations for the *baseline* building design**
  - 2. Energy calculations for the *proposed* building design**
  - 3. Calculations verifying the percentage improvement of the *proposed* design over the *baseline* design**
  - 4. A list of energy-related features incorporated into the *proposed* design to increase efficiency**

**Calculations will have to be prepared by an architect or an engineer that is registered in the State of New Mexico.**

- **Buildings that use no fossil fuels, or buildings that use very low amounts of fossil fuels, will be exempt from the requirements of this code.**
- **Buildings certified as LEED Silver (4 energy points, minimum), or above, will also be exempt.**

- A *prescriptive* approach will be allowed for small (20,000 s.f. or less) office and retail buildings. The requirements for calculations will be waived if an adopted list of energy related items is incorporated into the design of these buildings. The architect or the engineer will, however, be required to submit a checklist verifying that each of the listed items has been incorporated into the design and where a reference to each of the items can be found in the construction drawings.
- A requirement for a *Thermal Bypass Inspection* has been added.

## VOLUME II

### ONE- AND TWO-FAMILY DETACHED DWELLINGS AND TOWN HOUSES

- Volume II adopts, and amends, the 2006 International Energy Conservation Code.
- Furnaces are required to be 90% efficient (AFUE) and to be *Energy Star* labeled.
- Boilers, heat pumps, and ventilating fans are all required to be *Energy Star* labeled.
- Air conditioners will be required to have a seasonal energy efficiency rating (SEER) of 15.
- More efficient water heaters will be required and, after January 1, 2009, will have to be *Energy Star* labeled.
- 70% of all interior lighting is required to be *Energy Star* labeled.
- Attics shall be ventilated in accordance with the 2006 International Residential Code.
- After January 1, 2009, reflective roof coverings that meet *Energy Star* criteria will be required.

- The insulation requirement for (radiant) heated slabs will be increased to R-20.
- After January 1, 2009, the minimum insulation requirement for walls will be increased to R-19.
- A requirement for a *Thermal Bypass Inspection* has been added.
- Supply and return ducts shall be insulated to a minimum of R-8. Ducts in floor trusses shall be insulated to a minimum of R-6. Ducts shall be sealed and supported in accordance with the 2006 International Residential Code.
- After June 1, 2008, hot water pipes shall be insulated to a minimum R-4 for piping two inches, or less, in diameter and to a minimum of R-6 for piping greater than two inches in diameter.
- After January 1, 2009, the primary source for heating swimming pools shall come from solar collectors. Until then, heated swimming pools shall be equipped with a cover that has a minimum insulation value of R-12.
- Buildings that use little, or no, fossil fuels will be exempt from the requirements of this code.
- Buildings certified as LEED H Silver, or above, and buildings certified as Build Green New Mexico Silver, or above, are also exempt.

